

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-39. Canceled.

40. (New) Apparatus for logging the use of a bandwidth-on-demand network, comprising first recording means for recording connections established on the network, an application server controlling use of a specified application, the application server having second recording means for recording calls made on the network using that application, and a logging device for receiving inputs from the first and second recording means, and generating an output according to said inputs, wherein means are provided to make connections available at a plurality of bandwidths, the apparatus being arranged to generate different outputs at different bandwidths..

41. (New) Apparatus according to claim 40, wherein the second recording means comprises means to receive information transmitted to the application server by the end users and to generate an output according to said inputs.

42. (New) Apparatus according to claim 41, wherein the application server has means for logging the activities of the end users and the information provided by the end users, and generating an output accordingly.

43. (New) Apparatus according to claim 42, wherein the application server comprises means for interacting with end users such that the application server can log the activities of the end users.

44. (New) Apparatus according to claim 40, wherein the apparatus generates billing information according to the inputs from the recording means.

45. (New) Apparatus according to claim 40 wherein the application server is a peer-to-peer file transfer controller.

46. (New) Apparatus according to claim 45, wherein the controller has means for recording user inputs relating to the quality of files available for transfer.

47. (New) Apparatus according to claim 46, comprising means for adjusting the output according to the rated quality of the information accessed.

48. (New) A telecommunications connection process for a bandwidth-on-demand network, wherein connections are made available at a first bandwidth and one or more higher bandwidths, and a billing process is applied to connections established at the higher bandwidths but not at the first bandwidth, wherein the billing process records connections established on the network, and an application server controlling use of a specified application also records calls made on the network using that application, and an output is generated according to which connections make use of that application.

49. (New) A process according to claim 48, wherein the output is a charge to be made for the use of the network.

50. (New) A process according to claim 49, wherein a charge is also made to a second account when a connection is made making use of the said application server.

51. (New) A process according to claim 50, wherein the charges to be made to the second account are determined by the information transmitted to the application server by the end users.

52. (New) A process according to claim 48, wherein the application server logs the activities of the end users and the information provided by the end users to determine the output to be generated.

53. (New) A process according to claim 48, wherein the end users interact with the application server such that the application server can log the activities of the end users.

54. (New) A process according to claim 48, wherein the application server is a peer-to-peer file transfer controller.

55. (New) A process according to claim 54, wherein the controller has means for recording user inputs relating to the quality of files available for transfer.

56. (New) A process according to claim 55, wherein the outputs are adjusted according to the rated quality of the information accessed.

57. (New) A billing process for a bandwidth-on-demand network, wherein a billing system records connections established on the network, and an application server controlling use of a specified application also records calls made on the network using that application, and instructs a billing engine which connections made use of that application, and wherein such calls are charged by the billing engine at different rates according to whether those connections make use of that application, wherein connections are made available at a first low-bandwidth connection, and the billing process is only applied to connections established at higher bandwidths.

58. (New) A process according to claim 57, wherein connections making use of the application are charged at a lower rate than other connections.

59. A process according to claim 57, wherein a charge is also made to a second account when a connection is made making use of the said application server.

60. (New) A process according to claim 59, wherein the charges to be made to the second account are determined by the information transmitted to the application server by the end users.

61. (New) A process according to claim 60, wherein the application server logs the activities of the end users and the information provided by the end users to determine the charges to be made to the second account.

62. (New) A process according to claim 60, wherein the end users interact with the central application server using programming information having security measures to allow the central server to log the activities of the end users.

63. (New) A process according to claim 57, wherein the application server is a peer-to-peer file transfer controller.

64. (New) A process according to claim 63, wherein the controller has means for recording user inputs relating to the quality of files available for transfer.

65. (New) A process according to claim 64, wherein the call charges are adjusted according to the rated quality of the information accessed.

66. (New) A billing system for a bandwidth-on-demand network, comprising first recording means for recording connections established on the network, an application server controlling use of a specified application, the application server having second recording means for recording calls made on the network using that application, and a billing engine for receiving inputs from the first and second recording means, and for generating charges for calls at different rates according to said inputs, wherein means are provided to make connections available at a plurality of bandwidths, the billing system being arranged to charge different rates at different bandwidths..

67. (New) A billing system according to claim 66, wherein the second recording means comprises means to receive information transmitted to the application server by the end users and to generate charges according to said inputs.

68. (New) A billing system according to claim 67, wherein the application server has means for logging the activities of the end users and the information provided by the end users to determine the charges to be made.

69. (New) A billing system according to claim 68, wherein the central application server comprises means for interacting with end users using programming information having means to allow the central server to log the activities of the end users.

70. (New) A billing system according to claim 66, comprising an interface with a further billing system for transferring accounting information to the further billing system.

71. (New) A system according to claim 70, wherein one of the said rates is zero.

72. (New) A system according to claim 66, wherein the application server is a peer-to-peer file transfer controller.

73. (New) A system according to claim 72, wherein the controller has means for recording user inputs relating to the quality of files available for transfer.

74. (New) A system according to claim 73, comprising means for adjusting call charges according to the rated quality of the information accessed.